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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/733,400

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Shuji Ono

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EXAMINER

KUCAB, JAMIE R

ART UNIT

PAPER NUMBER

3621

NOTIFICATION DATE

DELIVERY MODE

08/25/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/733,400	<b>Applicant(s)</b> ONO, SHUJI	
	<b>Examiner</b> JAMIE KUCAB	<b>Art Unit</b> 3621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3,6 and 8-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,6 and 8-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 C.F.R. §1.114***

1. A request for continued examination ("RCE") under 37 C.F.R. §1.114, including the fee set forth in 37 C.F.R. § 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 C.F.R. §1.114, and the fee set forth in 37 C.F.R. §1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 C.F.R. §1.114. Applicant's submission filed on April 28, 2008 has been entered.

### ***Acknowledgements***

2. In accordance with the RCE above, claims 1-3, 6, and 8-11 are currently pending.
3. This Office action is given Paper No. 20080812 for reference purposes only.
4. Based on a comparison of the PGPub 2004/0139020 A1 with Applicant's originally submitted specification, the PGPub appears to be a fair and accurate record of the Applicant's specification. Therefore, if necessary any references in this action to Applicant's specification refer to paragraph numbers in the PGPub.
5. All references to the capitalized version of "Applicant" refer specifically to the Applicant or Applicants of record in the instant application. Any references to lowercase versions of "applicant" or "applicants" refer to any or all patent applicants. Unless expressly noted otherwise, references to the capitalized version of "Examiner" refers to the Examiner of record while reference to or use of the lower case version of "examiner"

or “examiners” refers to examiner(s) generally. The notations in this paragraph apply to any future Office actions from this Examiner.

### ***Drawings***

6. The drawings are objected to under 37 C.F.R. §1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the plurality of assistant articles must be shown or the feature canceled from the claims. No new matter should be entered.

7. Corrected drawing sheets in compliance with 37 C.F.R. §1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 C.F.R. §1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

8. The following is a quotation of the second paragraph of 35 U.S.C. § 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 1-3 and 6 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

10. Applicant's recitation "the same authentication information" in claim 1 is unclear to a person having ordinary skill in the art at the time of the invention. Is this the same authentication information as "the plurality of authentication information"? Is the information that is the same across the assistant articles or across both the main and assistant articles? Is all of the information across the articles the same or do they contain other information besides some authentication information which is the same? For purposes of applying the prior art, the Examiner is interpreting "the plurality of authentication information" to be at least one piece of identical information shared across the assistant articles.

***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 1-3, 6, and 8-11 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Houvener et al. (6,070,141) in view of Al-Salqan et al. (6,687,823) and further in view of Holtzman et al. (6,400,272).

13. Regarding claims 1, 3, 8, and 9, Houvener et al. disclose an authentication apparatus for performing a personal authentication process, comprising:

- an authentication information receiving unit (1) for receiving an authentication information (col. 11 lines 57-58 and col. 11 lines 65-66) held by each of a plurality of articles (col. 11 lines 45-48) for authentication from each of the plurality of articles for authentication carried by a right person; and
- a personal authentication unit (16) for performing the personal authentication process using the plurality of authentication information received by said authentication information receiving unit.

14. Houvener et al. fail to explicitly disclose that at least one of the articles for authentication communicates with the authentication information receiving unit by radio and that said plurality of articles for authentication are physically attached to a plurality of portable articles carried by said right person. However, Holtzman et al. teach articles for authentication (RFID tag, Abstract) that communicates with an authentication information receiving unit (computer, Abstract) by radio (col. 1 lines 17-35) and that said plurality of articles for authentication are physically attached to a plurality of portable articles carried by said right person (col. 12 line 54 - col. 13 line 9). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the articles of authentication and authentication information receiving unit of Houvener et al.

to include the radio communication capability and portability of Holtzman et al. because these modifications were part of the capabilities of one skilled in the art and would have achieved the predictable results of ease of transportation of the articles and authentication without physical contact between the articles of authentication and authentication information receiving unit.

15. However, Houvener/Holtzman fail to explicitly disclose:

- said personal authentication receiving unit certifies the right person when a total number of the plurality of authentication information respectively received from the different articles is more than a predetermined reference number,
- said personal authentication unit decides said reference number according to an object of the personal authentication, and
- the plurality of articles for authentication includes a main article and a plurality of assistant articles, each of said plurality of assistant articles holding the same authentication information, said personal authentication unit certifying the right person when receiving said authentication information from said main article and said authentication information from any one of said assistant articles.

16. Al-Salqan et al. teach an authentication system (col. 2 line 52 - col. 7 line 20, particularly Fig. 2 and associated text) including:

- said personal authentication receiving unit certifies the right person when a total number of the plurality of authentication information respectively received from the different articles is more than a predetermined reference number (may

require that the user satisfy or pass at least a selected number of these tests in order to gain access, col. 4 lines 18-41),

- said personal authentication unit decides said reference number according to an object of the personal authentication (The threshold test score  $TS_{thr}$  may vary with the particular application for which access is sought, col. 4 lines 18-41), and

17. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the articles of authentication of Houvener/Forslund by the technique of multiple authentication tests as taught by Al-Salqan et al., because this technique was recognized as part of the ordinary capabilities of one skilled in the art and would have achieved the predictable result of enhancing total security (col. 2 lines 25-38).

18. Houvener/Holtzman/Al-Salqan fail to explicitly disclose:

- the plurality of articles for authentication includes a main article and a plurality of assistant articles, each of said plurality of assistant articles holding the same authentication information, said personal authentication unit certifying the right person when receiving said authentication information from said main article and said authentication information from any one of said assistant articles.

19. However, Al-Salqan discloses multiple articles of authentication and certifying the right person when receiving authentication information from the articles of authentication and weighting the articles differently (Abstract), therefore, it would have been obvious to require three or more articles for authentication and weight them such that a main (higher-weighted) article and at least one of an assistant (lower-weighted) article were



required in order to certify the right person (grant access). Such an arrangement would perform substantially the same function in substantially the same way to obtain substantially the same result as Applicant's invention.

20. Regarding claim 2, Al-Salqan et al. disclose the authentication apparatus further comprising an authentication information holding unit (computer) for previously holding weight coefficients showing weights of the authentication information in response to each of the plurality of authentication information (col. 3 lines 13-15), said personal authentication unit acquires the weight coefficient corresponding to the received authentication information from said authentication information holding unit, and certifies the right person when a sum of the acquired weight coefficients is greater than a predetermined reference value ( $TS_{thr}$ , col. 4 line 18 - column 5 line 4, Fig. 2).

21. Regarding claim 6, Houvener et al. further disclose that one of the plurality of articles for authentication holds an identification information identifying the right person as said authentication information (col. 9. lines 36-39).

22. Regarding claim 10, Houvener et al. further disclose:

- wherein one of said articles for authentication includes an authentication key generating unit (col. 10 lines 29-33) for receiving said authentication information held by that article for authentication from the other articles for authentication, and generating an authentication key (the user identification number of col. 10 lines 28-31) for the personal authentication based upon the received authentication information and the authentication information held by that article for authentication in advance,

- said personal authentication unit of said authentication apparatus receives said authentication key from said article for authentication that has generated said authentication key, and certifies the right person using said authentication key (col. 10 lines 56-62).

23. Regarding claim 11, Houvener et al. further disclose:

- wherein said article for authentication generates a decoding key (the PIN of col. 10 lines 28-31) for decoding an encoded information using said authentication key (135),
- said personal authentication unit performs a decoding process using said decoding key (130).

***Examiner Note***

24. The Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the Applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may be applied as well. It is respectfully requested from the Applicant, in preparing responses, to fully consider a reference in its entirety as potentially teaching all or part of the claimed invention as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

***Claim Interpretation***

25. Independent claims (1 and 8) are examined together, since they are not patentably distinct. If Applicant expressly states on the record that two or more independent and distinct inventions are claimed in this application, the Examiner may require the applicant to elect an invention to which the claims will be restricted.

26. The following are examples of recitations that have been considered but given less patentable weight because they fail to add any steps/structure and are thereby regarded as intended use language:

“for receiving an authentication information ...” in claims 1 and 8,

“for performing the personal authentication process ...” in claim 1.

To be especially clear, the Examiner has considered all claim limitations. However, the recitation of intended use of the claimed invention must result in additional

steps/structure in order to further limit the claims. Where possible, in order to advance prosecution, the Examiner has addressed these limitations in anticipation of Applicant amending the claims to positively recite these limitations (for example, -- an authentication information receiving unit that receives an authentication information ...-- ).

### ***Response to Arguments***

27. Applicant's arguments with respect to the §103 rejections of the claims have been considered but are moot in view of the new grounds of rejection.

### ***Conclusion***

28. References considered pertinent to Applicant's disclosure are listed on form PTO-892. All references listed on form PTO-892 are cited in their entirety.

29. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Jamie Kucab whose telephone number is 571-270-3025. The Examiner can normally be reached on Monday-Friday 9:30am-6:00pm EST.

30. Suggestions or examples of claim language provided by the Examiner in this Office Action are just that—suggestions or examples—and do not constitute a formal requirement mandated by the Examiner. Unless stated otherwise by an express indication that the claim is “allowed,” exemplary claim language provided by the Examiner to overcome a particular rejection or to change claim interpretation has not been addressed with respect to other aspects of patentability (e.g. §101 patentable

subject matter, §112 1st paragraph written description and enablement, §112 2nd paragraph indefiniteness, and §102 and §103 prior art). Therefore, any claim amendment that incorporates an Examiner suggestion or example or simply changes claim interpretation will nevertheless require further consideration and/or search and a patentability determination as noted above.

31. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Andrew Fischer can be reached on 571-272-6779. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

32. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JK

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